

### CLAIM AMENDMENTS

1. (Currently Amended) Multistage centrifugal compressor having a tank which can be opened horizontally, comprising a lower semi-tank (11) and an upper semi-tank (12), a shaft 13 having a series of rotors 14 and a series of stages (10) each of which comprising, in turn, a series of lower semi-diaphragms 16 and a series of upper semi-diaphragms 18, a lower half-ring (21) and an upper half-ring (22) which can be coupled to form a bearing ring, said lower half-ring (21) being fixed internally to the lower semi-tank (11), and said corresponding upper half-ring (22) being fixed to the upper semi-tank (12), ~~characterized in that wherein~~ in each stage (10) of the multistage centrifugal compressor, the lower semi-diaphragms (16) are tightly constrained to one another by blocking means, to form a first pile (41) of lower semi-diaphragms (16) and, the corresponding upper semi-diaphragms (18) are tightly constrained to one another by blocking means, to form a second pile (42) of lower semi-diaphragms (16), and in that said first pile (41) can be constrained to said lower half-ring (21) and said second pile (42) can be constrained to said upper half-ring (22).

2. (Currently Amended) The multistage centrifugal compressor having a tank which can be opened horizontally according to claim 1, ~~characterized in that wherein~~ said blocking means include first axial screws (17) and second axial screws (19) to constrain the lower semi-diaphragms (16) and the upper semi-diaphragms (18), respectively.

3. (Currently Amended) A procedure for the assembly of a multistage centrifugal compressor having a tank which can be opened horizontally according to claim 1, ~~characterized in that it~~ further comprising ~~comprises~~ the following stages: (a) forming a series of first piles of lower semi-diaphragms (16), and a series of second piles (42) of ~~up per upper~~ semi-diaphragms (18), (b) assembling the series of first piles (41) of lower semi-diaphragms (16) in the lower tank (11), by constraining a lower semi-diaphragm (16) of each first pile (41) to the lower half-ring (21) of the corresponding stage (10), (c) assembling the shaft (13) equipped with the series of rotors (14) on the series of first piles (41) of lower semi-diaphragms (16), (d) coupling and constraining the series of second piles (42) with the series of first piles (41), (e) assembling the upper semi-tank (12) on the lower semi-tank (11), constraining an upper semi-diaphragm (18) of each second pile

~~(42)~~ to the upper half-ring ~~(22)~~ of the corresponding stage ~~(10)~~ and (f) closing the multistage centrifugal compressor.

4. (Currently Amended) A procedure for the assembly of a multistage centrifugal compressor having a tank which can be opened horizontally according to claim 3, ~~characterized in that~~ wherein in stage (a) the first pile ~~(41)~~ of lower semi-diaphragms ~~(16)~~ is obtained by constraining the lower semi-diaphragms ~~(16)~~ to one another, whereas the second pile ~~(42)~~ of upper semi-diaphragms ~~(18)~~ is obtained by ~~constraining~~ constraining the upper semi-diaphragms ~~(18)~~ to one another.

5. (Currently Amended) A procedure for the assembly of a multistage centrifugal compressor having a tank which can be opened horizontally according to claim 4, ~~characterized in that~~ wherein stage (a) is effected by constraining the lower semi-diaphragms ~~(16)~~ to one another by means of first axial screws ~~(17)~~ and by constraining the upper semi-diaphragms ~~(18)~~ to one another by means of second axial screws ~~(19)~~.

6. (Currently Amended) A procedure for the assembly of a multistage centrifugal compressor having a tank which can be opened horizontally according to claim 3, ~~characterized in that~~ wherein stage (d) is effected by constraining the first pile ~~(41)~~ to the second pile ~~(42)~~ by means of screws ~~(15)~~.